

U.S. Application No.: NEW
PRELIMINARY AMENDMENT

Attorney Docket: 3926.122

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-9 (cancelled)

10. (new) A granulated material for 3D binder printing, said granulated material composed of particles as a substrate provided with a surface layer (2),

wherein the surface layer (2) consists of a polyvinyl butyral and has a nonpolar outer surface, and

wherein, in the case that the particles are polar, the polyvinyl butyral includes both polar and nonpolar groups.

11. (new) The granulated material as claimed in claim 10, wherein the thickness of the surface layer approximately corresponds to a monolayer of polyvinyl butyral monomers.

12. (new) The granulated material as claimed in claim 10, wherein the thickness of the surface layer amounts to approximately 0.1 to 10% of the mean radius of the particles.

13. (new) A process for producing a granulated material for 3D binder printing, comprising:

- applying a surface layer (2) of a polyvinyl butyral to starting particles (1) to form said granulated material,

wherein, in the case that the starting particles (1) are polar, the polyvinyl butyral includes both polar and nonpolar groups.

14. (new) The process as claimed in claim 13, wherein the starting particles (1) are brought into contact with a solution which contains the material of the surface layer (2) in dissolved form, and wherein the product of said contacting is dried by evaporation of the solvent.

15. (new) A 3D binder printing process for producing an object from a granulated material comprising particles provided with a surface layer (2), said process comprising the steps of:

- placing a layer of the granulated material onto a base,
- wetting predetermined regions (3) of the layer with a binder liquid, and
- repeating these steps until the object has been formed, the binder liquid being selected from among liquids in which the surface layer (2) of the particles of the granulated material is soluble,

wherein the granulated material is a material with a nonpolar surface.

16. (new) The 3D binder printing process as claimed in claim 15, wherein the granulated material is composed of particles as a substrate provided with a surface layer (2),

wherein the surface layer (2) consists of a polyvinyl butyral and has a nonpolar outer surface, and

wherein, in the case that the particles are polar, the polyvinyl butyral includes both polar and nonpolar groups.

17. (new) The 3D binder printing process as claimed in claim 15, further comprising adjusting the viscosity of the binder liquid by the addition of higher alcohols.

18. (new) An object formed from a granulated material comprising particles (1) provided with a surface layer (2) joined to one another,

wherein said surface layer (2) consists of a polyvinyl butyral and has a nonpolar outer surface,

wherein, in the case that the particles (1) are polar, the polyvinyl butyral includes both polar and nonpolar groups, and

wherein said process comprises the steps of:

- placing a layer of the granulated material onto a base,
- wetting predetermined regions (3) of the layer with a binder liquid, and
- repeating these steps until the object has been formed,

the binder liquid being selected from among liquids in which the surface layer (2) of the particles of the granulated material is soluble.